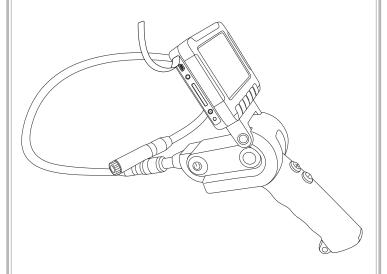
User Manual

Flexible Inspection Camera - SNAKESCOPE with 3.5" color LCD Monitor



Version: R710-1.0

General Safety Information:

Thanks for choosing our flexible snakescope. It is a worldwide patented product with 3.5"TFT LCD color monitor. Please read the user manual carefully before using this product.

Use Area Safety

- •Keep using area clean and well lit. (Cluttered or dark areas make accidents easily.)
- •Do not operate SNAKESCOPE in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
- •Do not use SNAKESCOPE in an area where it could contact electrical wiring or an electrically charged object. Contact with a "live" wire or object will make exposed metal parts of the tool "live" and shock the operator.
- •Do not use SNAKESCOPE near moving machinery.
- Do not use it near any heat sources.
- •Keep children and bystanders away while operating a SNAKESCOPE.

Electrical Safety

•Do not expose SNAKESCOPE to rain or wet conditions.

Personal Safety

- •Stay alert, watch what you are doing and use common sense when operating a SNAKESCOPE. Do not use a SNAKESCOPE while you are tired or under influence of drugs, alcohol or medication.
- •Use personal protective equipment. Always wear eye protection and safety.
- •Do not overreach. Keep proper footing and balance at all times.

Snakescope Use and Care

- •This SNAKESCOPE (Visual Inspection Camera Device) is not intended for medical use or personal inspection.
- •Store idle SNAKESCOPE out of reach of children and do not allow persons unfamiliar to SNAKESCOPE or these instructions to operate SNAKESCOPE.
- •Maintain SNAKESCOPE. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect SNAKESCOPE operation. Do not use if SNAKESCOPE smokes or gives off fumes. If damaged, have the SNAKESCOPE repaired before using
- •Use SNAKESCOPE and accessories, in accordance with these instructions, taking into account the working conditions and the work to be performed.
- •Clean only with dry cloth.
- •Always remove the battery pack before cleaning.
- •SNAKESCOPE is designed to be powered by 4ea Alkaline AA batteries.

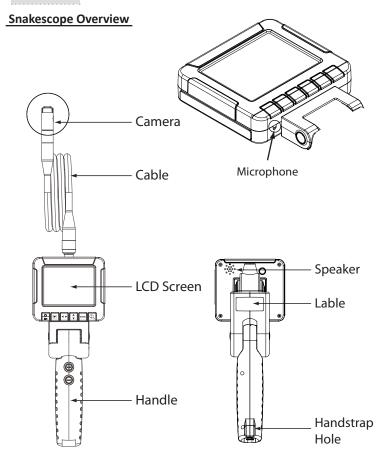
Battery Use and Care

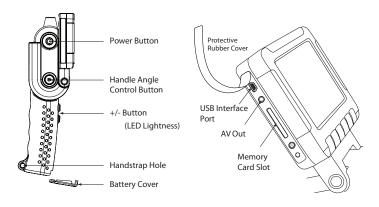
- •Change the batteries only with Alkaline AA batteries.
- •When the battery is not used, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make connection from one terminal to another.
- •Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.

Service

- Contact a distributor or shop for all repairs. Have your SNAKESCOPE serviced by a qualified repair person using only identical replacement parts.
- Never disassemble the SNAKESCOPE or try to do any rewiring on SNAKESCOPE's electrical system.

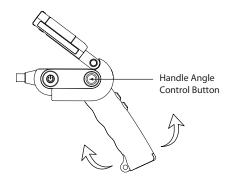
Structure





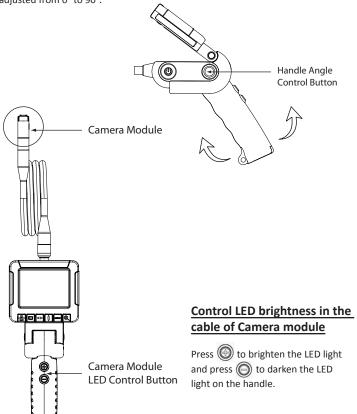
Change Handle's Angle

Press Handle Angle Control Button and pull or push the handle. The angle of Handle can adjust 0°, 45° and 80°.



Control LCD Monitor's angle

Move LCD Monitor and move to downward or upward. The angle of Handle can be adjusted from 0° to 90° .

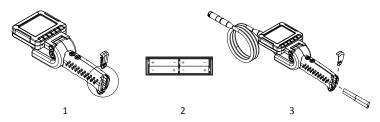


Installation

WARNING Change only the Alkaline batteries. For specific changing instructions, read the operator's manual supplied.

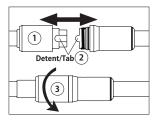
Inserting/Removing the Battery

- 1.To insert or remove the batteries, loosen the screw on the bottom side in the handle part and pull the battery cover down.
- 2.Take the Battery cartridge out and insert four (4) AA batteries, as shown.
- 3.Insert Battery cartridge into handle and tighten the screw as shown.



Installing the Camera with Flexible Shaft

- 1.Slide back the socket sleeve.
- 2.Line up the tab on the cable with the detent on the socket
- $\ensuremath{\mathsf{3.Press}}$ the socket and cable together and slide the sleeve over the connection.
- Tighten the sleeve securely.

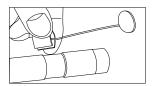


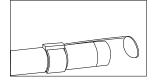
Warning

To reduce the risk of injury, wear safety goggles or glasses with side shields. Always remove battery before changing accessories or making adjustments.

Installing Accessory

Four accessories (pin, mirror, hook and magnet) attached with the package to the imager head are installed in the same way. To connect the accessory, hold the imager head, slip the end of the accessory over the flats of the imager head.

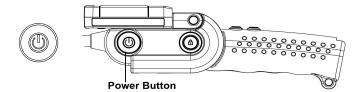




Operation

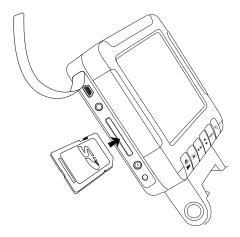
Turning On/Off

Press the On/Off button to turn the SNAKESCOPE on/off. The blue light will be on when power is on.



Inserting/Removing the Memory Card

- 1.Open the protective rubber cover to access memory card slots
- 2.Slide the memory card into the slot, the top of the Card should face opposite from the LCD Monitor Press in the card carefully and securely. It should click in place.
- 3.Close the protective rubber cover.
- 4.To remove the memory card, press the memory card in and release. It will pop out.

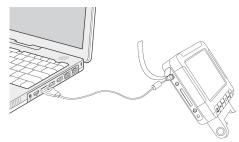


Note:

- •When the memory card is inserted to Memory Card Slot, then the icon of build be displayed on the LCD Monitor.
- •When the memory card is "Locked" with the write protection tab [10] in the lower position, the Locked icon will be displayed when taking picture or movie.No pictures or movies can be saved to the memory card.
- •The number of pictures that can be taken or movies recorded is based on the size of the memory card. If the memory card is full, the Disk Full icon will be displayed when taking a picture or movie. Nothing additional will be saved to the memory card.

Downloading to a Computer

Insert the USB interface cable into the port on the side of the SNAKESCOPE. Connect the USB end into the USB port on your computer.



Note: If you are unable to view the videos on your computer maybe because your computer is missing or has not installed the DIVX or XVID codec. The AVI file is recorded in MPEG4 format and your computer needs a DIVX or XVID codec to decode and play it.

Battery Gauge

The Battery Gauge is displayed in the higher right corner of the LCD while the $\sf SNAKESCOOE$ is on.



Set-up Menu

Symbol for Menu

	Preview image Manual Capture photo or video under preview mode(Photo/Photo3/ Movie/Movie clip(1 min) Play/pause under playback mode
▶	Switch between play & preview mode
<>	Review next picture or movie under playback mode Select the right or left menu under MENU mode
\$	Review next picture or movie under playback mode Select the top or next menu under MENU mode
MENU	Menu for advanced setting
£	Zoom In/Out(Max. X5) Thumbnail under playback mode

To enter the set-up menu, turn on the SNAKESCOPE and press MENU Button. Use $\diamondsuit \blacktriangleleft \blacktriangleright$ buttons to select and confirm the Menu by pressing MENU button.



Monitor with buttons

Preview

On pressing the On/Off button, the booting image of SNAKESCOPE displays. On the monitor, the oicon shows photo mode and the icon shows Movie mode.

There are four preview models: Photo, Photo3, movie, Movie Clip (limited to 1 minute)

Capture Photo and View

In Preview of photo mode, to capture photo and stop it, press the 🚆 button. The Capture of Photo performs with showing o icon on the monitor and sound. To see the photo captured, press the button. The photo is selected by pressing the ★ button for previous or next photo.

Taking video and Play
To take video with sound and stop it, press the button in Preview of Video mode. Push button to stop video taking. On recording the video mode, the icon blinks. Press the button to change the preview mode and playback mode. The video is selected by pressing the ◆▶ button for previous or next video, then push button to start play video. On playing back, will display and on pausing, will display and on stopping, will display by pushing button.

Zoom In/Out

To operate Zoom In mode, press the button. The Zoom In function can be operated to 1 ~5 times. It will escape Zoom In Mode after up to 5 times.

Menu (on Preview mode)

There are four main menu that user can set up when you are on preview mode. Push button to select the menu which you want to set up.

W	Manual Capture
2	Advanced Setting
6	Language Select
©	Time Set up

Manual Capture

Push "Menu" button under preview mode to get the manual capture set up monitor. Use 🐧 button to select capture mode from Photo1, photo3, movie, movie clip and exit



Photo1

To take only 1 photo by pressing the button, select Photo1 by pressing MENU button and exit by the \$\displaystyle button.

Photo3

To take 3ea photos by pressing 1time the button, select Photo3 by pressing MENU button and exit by the and MENU button. On preview monitor, the icon will show up.

To record the movie by pressing the abutton, select the Movie by pressing MENU button and exit by the 🔷 and MENU button.

Movie Clip

To record only 1 minute movie, select Movie Clip by pressing MENU button and exit by the $\begin{cases} \begin{cases} \begin{$

EXIT

Select EXIT bar and push MENU button to exit the set up model

Note: To transfer from Photo mode to Movie mode, press MENU button and select Movie or Movie Clip and press again the MENU button. On completing, press ^ and select EXIT and press MENU Button again. Press the ____ button, then the Monitor is back to the PREVIEW of movie mode. To transfer from Movie mode to Photo mode, verse versa

Advanced Setting

This section is for setting up advanced functions of SnakeScope. Use button to enter advanced setting.



Photo Quality

To control the Photo Quality, select Advanced Setting => Photo Quality and press MENU Button. Among High Quality, Standard Quality, Low Quality, select one item and exit





To change the quality of Movie, select Advanced Setting => Movie Quality and press MENU button. Among QVGA and D1, select one and exit.



QVGA: 320*240 30fps AVI file (Video codec:MJPG)
D1: 720*480 30fps AVI file (Video codec: MJPG)

TV Output Standard

To change the TV Output Standard, select Advanced Setting => TV Output Standard and press MENU button. Between NTSC and PAL, select one and exit.



Format

To format your SD Card, select Advanced Setting => Format and press MENU button. On monitor, the confirmation for format will come out. If want to format, then select YES and press MENU button, if no, select NO and press MENU button.



Language select

On Preview mode, press MENU buttons and move to "Language Select" section by pressing > buttons and select the language which you want to set up. On completing the selection of language, press MENU button. To escape this section, press and select EXIT and press MENU button. There are three default languages: English, Germany and Chinese.



Set Time/Date

To set Time and Date, press MENU button and select Set Time/Date section by pressing **< >** button.



Set Time/Date

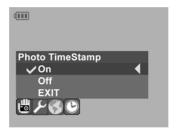
Enter the Set Time/Date section, the monitor displays as below;



The first line means Year/Month/Date and the second line means Time/Minutes/ Seconds.

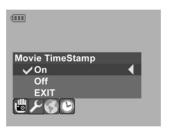
Photo Time Stamp

To display or close the Photo Time Stamp, select Photo Time Stamp by pressing and press MENU Button. To turn on or off the Photo Time Stamp, select ON or OFF by pressing the \$\display\$ button and press the MENU button.



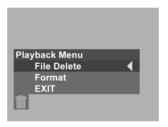
Movie Time Stamp

To display or close the Movie Time Stamp, select Movie Time Stamp by pressing and press MENU Button. To turn on or off the Movie Time Stamp, select ON or OFF by pressing the button and press the MENU button.



Playback Menu

When you press MENU button on Playback mode, it goes to the file delete and format menu.



File Delete

To delete the photo captured or video taken, select "File Delete" and press "MENU" Button to enter sub-menu. To delete 1 file only, then select "Single" and press MENU button. To delete all files in SD Card, select "All" and press MENU. To exit file delete menu, select "Cancel" and press MENU button.



Format

To format SD Card, select Format and press MENU. Select "Yes" and push Menu button to start format. To escape the format, select "No" and press MENU. (Same as above format menu)



Exit

To escape Playback MENU, select EXIT by pressing the \Diamond button and press MENU.

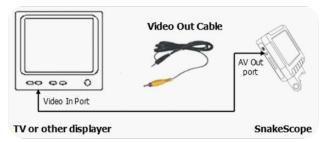
File View by Thumbnail type

To view the files which are taken or recorded, press the button to Playback mode and press the button. To playback Movies or pictures in the Thumbnail, select the Movie by pressing the or button and press MENU button and button after selecting the file to play. To return the Thumbnail type View, pause or stop the movie by pressing the button and press the button and MENU button by step.

TV Output

To display SnakeScope Monitor out to TV or other displayer, connect Video-out cable into SnakeScope's AV Out port and video in port on the TV or other displayer.

On Video-out to TV or other displayer, the sound comes out from SnakeScope, not from TV or other displayer.





^{**}Operation manual including in the package.

Accessories

Product Specifications:

- •3.5" TFT LCD Monitor (QVGA, 320 X 240)
- •0.3M Pixel, 60fps@QVGA, 960mV/(Lux. Sec) CMOS Camera Sensor 1/6"
- •Focal Range 20mm-280 mm (100mm recommended)
- •Camera unit: water splash resistant (IPX)
- •Image Capture in JPEG file format, video Recording in Motion JPEG (AVI)
- •Display resolutions: Image: 720x480 pixels, Video (With Audio) 720x480p (30 fps)
- •5x variable zoom
- •Adjustable Handle (0º, 45º, 80º) and monitor angle (0º to 90º)
- •Interface: SD Card (up to 32GB SDHC), USB 1.1, RGB video out (NTSC/PAL)
- •4 LEDs with adjustable light intensity & 10.80mm outer lens
- •Flexible cable of 100cm Length, 7.2 mm outer diameter
- •OSD Language: English default with other languages selectable
- •Battery Life: 3 hours on 4 AA type alkaline batteries
- Package style: Plastic tool box or paper carton

Maintenance

Cleaning

Clean dust and debris from LCD Monitor and Battery Pack. Keep Snakescope handles clean, dry and free of oil or grease. Use only soap and a damp cloth to clean the SnakeScope.

Repairs

For repairs, contact the distributor where you buy in your territory.

Troubleshooting

- 1.Can't power on: Check your Battery status.
- 2.Can't display the monitor to TV: Check the cable is connected correctly.
- 3.Can't transfer the file to Computer: Check whether the cable is connected.
- 4.Can't display Preview mode: Check your battery status
- 5.Can't take photos or record video: Check whether your SD card is inserted and work normally.

Limited Warranty Policy

SnakeScope is warranted to the original purchaser only to be free from defects in material and workmanship. Subject to certain exceptions, SnakeScope will be repaired or replaced with any part on an electric power tool which, after examination, is determined by the manufacturer to be defective in material or workmanship for a period of one (1) year after the date of purchase. Return the SnakeScope and copy of proof of purchase to the distributor at your location with freight paid and insured. This warranty does not apply to damage that the manufacturer determines to be from repairs made or attempted by anyone other than the manufacturer authorized personnel, misuse, alterations, abuse, normal ware and team, lack of maintenance, or accidents.

Warranty registration is not necessary to obtain the applicable warranty on Snake-Scope product. The manufacturing date of the product will be used to determine the warranty period if no proof of purchase is provided at the time warranty service is requested.

The graphics included are subject to minor change without prior notce.



EU Environmental Protection

Waste Electrical products should not be disposed of with household waste.

Please recycle where facilities exist. Check with your local AUghtthroity or retailer for recycling advide